

REMARKS/ARGUMENTS

Re-examination and favorable reconsideration in light of the above amendments and the following comments are respectfully requested.

Claims 12, 13, 15 - 20, 24 - 30, 32 - 35, and 37 - 43 are pending in the application. Currently, all claims stand rejected.

By the present amendment, claims 12, 16, 24, and 30 have been amended; claims 13, 32 - 35 and 37 - 43 have been cancelled; and new claims 44 - 49 have been added to the application.

In the office action mailed June 19, 2006, claim 43 was rejected under 35 U.S.C. 112, second paragraph; claims 12, 13, 15 - 20, 32 - 35, and 38 - 42 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,183,197 to Howe; claims 12, 13, 15 - 20, 32 - 35, and 38 - 42 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,062,463 to Hoffmueller; claims 24 - 28 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,106,104 to Atkinson; claims 24 - 29, 32 - 35, and 37 - 42 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,536,773 to Datta; and claims 30 and 43 were rejected under 35 U.S.C. 103(a) as being unpatentable over Datta in view of U.S. Patent No. 5,496,045 to Millener.

The foregoing rejections are traversed by the instant response.

The rejection of claim 43 on indefiniteness grounds is now moot in view of the cancellation of claim 43.

Claim 12 has been amended by the instant amendment to say that the exposed portions are joined together "while in said fixture using a welding machine" so as to form said bristle arrangements. It is submitted that the Howe reference does not teach or suggest such a step. In Howe, the joined ends 10 are placed in a trough 14 containing a liquid binder 15. After the liquid binder is cured,

the bound bundles are removed from the placement guide 13 and formed into an arcuate array. The arcuate array is applied to a backing plate and a cover plate is placed on top of the backing plate. The two plates are clamped together and the excess bristles are trimmed off. A weld is then applied to the plates and to the bristles. Thus, the exposed portions are not in a fixture when they are joined together. In Howe, anything which can be called an exposed portion is long removed from the fixture when the exposed portions are welded.

With respect to Hoffmueller et al., there are no exposed portions. As can be seen from FIGS. 1 - 4, there are no portions of the bristles extending or projecting beyond the fixture. Thus, Hoffmueller et al. does not teach or suggest the step of "said arranging step further comprising placing each said tuft in said fixture so that a portion of the bristles forming each tuft with said bead project from said fixture to form a plurality of exposed portions." For this reason, claim 12 is allowable over Hoffmueller et al.

Claims 15 - 20 are allowable for the same reasons that claim 12 is allowable over Howe and Hoffmueller et al. as well as on their own accord. For example, claim 16 is allowable because neither of the cited and applied references teaches or suggests the step of securing the bristle arrangements between plates subsequent to said joining step to form a brush seal.

With respect to the various rejections of claim 24, this claim has now been amended to say that the discrete plates and the discrete bristle arrangements are joined together while in the fixture to form the multiple stages of the brush seal. Neither Atkinson nor Datta join a plurality of discrete plates and discrete bristle arrangements together in anything which can be called a fixture. In Atkinson, the various stages 60, 70, 80, and 90 are not

joined together while in the fixture. In fact, they are spaced apart by spacers 69, 79, and 89. Further, the stages 60, 70, 80, and 90 are held in place by the shoulder 55 and the retainer 56. The stages are never welded or other wise joined together. Datta suffers from the same deficiency. The various plates and bristles forming one pack are never joined to other packs while in the fixture. In other words, Datta never forms the multiple stages of the brush seal in the manner set forth in claim 24. For these reasons, claim 24 as amended is allowable over both Atkinson and Datta.

Claims 25 - 30 are allowable for the same reasons as claim 24 as well as on their own accord. For example, claim 29 is allowable because neither of the cited and applied references teaches or suggests the claimed welding step. Claim 30 is allowable because neither of the cited and applied references teaches or suggests using a windage cover.

New claim 44 is directed to a method for forming a brush seal comprising the steps of arranging a plurality of tufts of bristles in a fixture, spreading said bristles in a uniform fashion around said fixture, and welding said bristles together to form a one-piece bristle ring. It is submitted that none of the cited and applied references teach or suggest the steps of new claim 44.

New claim 45 is directed to a method for forming a multiple stage brush seal comprising the steps of placing a first plate in a fixture, placing a first bristle ring on the first plate, placing a second plate over the first bristle ring, placing a second bristle ring over the second plate, placing a third plate over the second bristle ring, and fusion welding the first plate, the first bristle ring, the second plate, the second bristle ring, and the third plate in a single step to form said multiple stage brush seal. Here again, it is submitted that none of the cited and applied references

teach or suggest the steps of new claim 45. New claims 46 - 49 depend from claim 45 and are allowable for the same reasons that claim 45 is allowable as well as on their own accord.

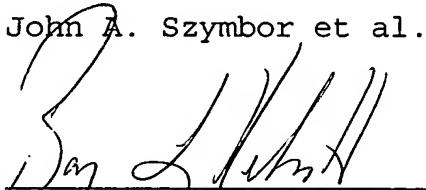
For the foregoing reasons, the instant application is believed to be in condition for allowance. Such allowance is respectfully solicited.

Should the Examiner believe an additional amendment is needed to place the case in condition for allowance, she is hereby invited to contact Applicants' attorney at the telephone number listed below.

A notice of appeal is appended hereto. The Director is hereby authorized to charge the notice of appeal fee of \$500.00 to Deposit Account No. 21-0279. Should the Director determine that an additional fee is due, he is hereby authorized to charge said fee to said Deposit Account.

Respectfully submitted,

John A. Szymbor et al.

By   
Barry L. Kelmachter  
BACHMAN & LaPOINTE, P.C.  
Reg. No. 29,999  
Attorney for Applicants

Telephone: (203) 777-6628  
Telefax: (203) 865-0297  
Email: [docket@bachlap.com](mailto:docket@bachlap.com)

Date: September 19, 2006

I, Karen M. Gill, hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313" on September 19, 2006.

